

DT12 Rec'd PCT/PTO 18 FEB 2005

- 1e -

ART 34 AMDT

Amended CLAIMS

1. Installation for processing flat objects (10) conveyed consecutively and parallel to the conveying direction, which installation comprises a supply means, a removal means and a processing drum (1) being driven in rotation around an essentially horizontal axis (T), wherein the processing drum (1) is arranged between the supply means and the removal means in such a way that the objects are supplied by the supply means to an entry point (A) at the periphery of the processing drum (1) and are removed from the periphery of the processing drum at an exit point (B) by the removal means, wherein the processing drum (1) comprises regularly alternating support elements (2) and tool elements (3) which extend axially and whose radial position is adjustable, and wherein the processing drum further comprises a pressing belt (4) running on the periphery of the processing drum (1) between the entry point (A) and the exit point (B), **characterized in that** the pressing belt (4) is arranged by means of a last deflection roller (5) before the entry point and/or by means of a first deflection roller (50) after the exit point to form at least a last part of the supply means and/or at least a first part of the removal means, upon which part the objects (10) are able to be conveyed to the drum periphery and/or away from the drum periphery, wherein said deflection rollers (5, 50) have a position which is independent of the radial position of the support and tool elements and wherein further conveyor parts are arranged to adjoin said deflection rollers in a manner which is independent of the radial position of the support and tool elements.

-
2. Installation according to claim 1, **characterized in that** the entry point (A) is situated in a lower, and the exit point (B) in an upper area of the processing drum (1), that the pressing belt (4) forms the last part of the supply means and that the first part of the removal means is a pivoting ramp (43).

CLAIMS

1. Installation for processing flat objects (10) conveyed consecutively and parallel to the conveying direction, which installation comprises a supply means, a removal means and a processing drum (1) being driven in rotation around an essentially horizontal axis (T), wherein the processing drum (1) is arranged between the supply means and the removal means in such a way that the objects are supplied by the supply means to an entry point (A) at the periphery of the processing drum (1) and are removed from the periphery of the processing drum at an exit point (B) by the removal means, wherein the processing drum (1) comprises regularly alternating support elements (2) and tool elements (3) which extend axially and whose radial position is adjustable, and wherein the processing drum further comprises a pressing belt (4) running on the periphery of the processing drum (1) between the entry point (A) and the exit point (B), **characterized in that** the pressing belt (4) is arranged by means of a last deflection roller (5) before the entry point and/or by means of a first deflection roller (50) after the exit point to form at least a last part of the supply means and/or at least a first part of the removal means, upon which part the objects (10) are able to be conveyed to the drum periphery and/or away from the drum periphery.
- 20 2. Installation according to claim 1, **characterized in that** the entry point (A) is situated in a lower, and the exit point (B) in an upper area of the processing drum (1), that the pressing belt (4) forms the last part of the supply means and that the first part of the removal means is a pivoting ramp (43).
- 25 3. Installation according to claim 1, **characterized in that** the entry point (A) is situated in a lower, and the exit point (B) in an upper area of the processing

drum (1), that the pressing belt (4) forms the last part of the supply means, and that, for transferring the processed objects to the removal means, the downstream sides of the support elements (2) are designed to spread from the drum periphery at the exit point (B).

- 5 4. Installation according to claim 1, **characterized in that** the entry point (A) is
situated in a lower, and the exit point (B) in an upper area of the periphery of
the processing drum (1), that the pressing belt (4) forms the last part of the
supply means, that a further belt (43) is arranged to run between the periphery
10 of the processing drum (1) and the pressing belt (4) and to run on the periphery
of the processing drum (1) between the entry point (A) and the exit point (B),
and that the further belt (43) is arranged, by way of another first deflection
roller (44) after the exit point to form the first part of the removal means.
- 15 5. Installation according to claim 1, **characterized in that** the entry point (A) is
arranged in a lower, and the exit point (B) in an upper area of the periphery of
the processing drum (1), that the pressing belt (4) forms the last part of the
supply means, that a further belt (43) is arranged to run between the periphery
of the processing drum (1) and the pressing belt (4) and to run on the periphery
20 of the processing drum (1) between the entry point (A) and the exit point (B),
and that the further belt (43) is arranged, by way of another last deflection
roller (44) after the exit point to forms the last part of the supply means.
6. Installation according to any one of claims 4 or 5, **characterized in that** the
further belt (43) consists of a plurality of pitched parallel strings.

- 18 -

7. Installation according to any one of claims 1 to 6, **characterized in that** the support elements (2) and the tool elements (3) are interconnected with a control means such that by activating the control means all support elements (2) and/or all tool elements (3) are simultaneously displaced radially.
- 5 8. Installation according to any one of claims 1 to 7, **characterized in that** the support elements (2) comprise a variable width at right angles to their axial extension.
9. Installation according to any one of claims 1 to 8, **characterized in that**, for differing processes, the tool elements (3) are exchangeable.
- 10 10. Installation according to any one of claims 1 to 9, **characterized in that** the installation further comprises means (11, 12) to supply a web of an auxiliary material such that the auxiliary material and the objects move along the drum periphery together.
11. Installation according to claim 10, **characterized in that** the tool elements (3)
15 are equipped to separate or partly separate the auxiliary material between the objects.
12. Installation according to claim 10 or 11, **characterized in that** the auxiliary material is a packing material (20) and that further supply means (11, 12) are designed in such away that the packing material (20) travels on both sides of
20 the objects (10) on the processing drum (1).

- 19 -

13. Installation according to claim 12, **characterized in that** the packing material (20) is a weldable packaging foil and that the tool elements (3) comprise welding means.
- 5 14. Installation according to claim 13, **characterized in that** the tool elements (3) comprise welding wires extending in the direction of an axis of the processing drum (1), which welding wires protrude from the drum periphery defined by the support elements (2) and are essentially continuously heated and co-operate with a Teflon-coating on the pressing belt (4).
- 10 15. Use of the installation 1 to 14 for packing printed products or small groups of printed products.